

## EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S1	11	("0127711" "6504238" "6828661" "6900524" "6979886").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/10/23 13:48
S2	25	("20010030355" "20010042904" "20020041011" "20020079561" "20020121684" "20020153597" "20030001244" "20030006492" "20030042581" "20030073265" "4283839" "5466966" "6025640" "6075284" "6078098" "6081029" "6166430" "6211462" "6229200" "6448633" "6455356" "6462424" "6476469" "6521987" "6700186").PN. OR ("6979886").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2006/10/23 13:49
S3	45	("5270491" "5529959" "5811799" "5898218" "6191359" "6208020" "6303978" "6355502").PN. OR ("6476469").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2006/10/23 13:51
S4	77	("3838984" "4530152" "4707724" "4756080" "4812896" "5041902" "5157480" "5172213" "5172214" "5200362" "5200809" "5214845" "5216278" "5221642" "5258094" "5273938" "5277972" "5278446" "5279029" "5332864" "5336931" "5343076" "5406124" "5424576" "5435057" "5474958" "5521429" "5604376" "5608267" "5639990" "5640047" "5641997" "5646831" "5650663" "5683806" "5696666" "5701034" "5710064" "5776798" "5783861" "5835988" "5859471" "5866939" "5877043" "5894108" "5977613" "5977615" "5977630" "5981314" "6001671" "6025640" "6130115" "6130473" "6143981" "6198171" "6225146" "6229200" "6242281" "6281568").PN. OR ("6455356").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2006/10/23 13:55
S5	116	("5172214" "5521429").PN. OR ("5977613").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2006/10/23 14:03

## EAST Search History

S6	69	("20030073265"   "3838984"   "4530152"   "4707724"   "4756080"   "4812896"   "5041902"   "5157480"   "5172213"   "5172214"   "5200362"   "5200809"   "5214845"   "5216278"   "5221642"   "5258094"   "5273938"   "5277972"   "5278446"   "5279029"   "5332864"   "5336931"   "5343076"   "5391439"   "5406124"   "5424576"   "5435057"   "5521429"   "5604376"   "5608267"   "5639990"   "5640047"   "5641997"   "5646831"   "5650663"   "5683806"   "5696666"   "5701034"   "5710064"   "5736432"   "5776798"   "5783861"   "5835988"   "5859471"   "5866939"   "5877043"   "5894108"   "5977613"   "5977630"   "5981314"   "6001671"   "6018189"   "6025640"   "6130115"   "6130473"   "6143981"   "6198171"   "6225146"   "6229200"   "6242281"   "6281568"   "6437429"   "6448633"   "6483178"   "6545332"   "6580161"   "6611047"   "6700189"   "6861734").PN. OR ("7042068"). URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2006/10/23 14:42
S7	1	"6373127".pn. and tape	US-PGPUB; USPAT; USOCR	OR	ON	2006/10/23 14:59
S8	2477	(257/676).CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/10/23 15:00
S10	7	S8 and pad with rim	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/10/23 15:02
S11	282813	"257"(666-677).ccls. and pad with rim	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/10/23 15:02
S12	282813	"257"/(666-677).ccls. and pad with rim	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/10/23 15:03

## EAST Search History

S13	282813	"257"/(666-677).ccls. and pad with rim	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/10/23 15:04
S14	9553	(257/666-677).CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/10/23 15:04
S15	18	S14 and pad with rim	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/10/23 15:04
S16	11	S15 not S10	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/10/23 15:04
S17	5273	pad with rim	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/10/23 15:05
S18	182	(chip IC die ) with pad with rim	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/10/24 10:04
S19	1986	(chip IC die ) with pad with ring	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/10/24 10:04
S20	9559	(257/666-677).CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/10/24 10:04
S21	148	S19 and S20	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/10/24 10:04

## EAST Search History

S22	12	("4532222" "5986209" "6114752" "6424031" "6504238" "6638790").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/10/24 10:42
S23	25	("4258381" "4857989" "5214307").PN. OR ("6114752").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2006/10/24 10:43
S24	8	("5140404" "5491362" "6114752" "6191490").PN. OR ("6440779").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2006/10/24 10:45
S25	25	("4258381" "4857989" "5214307").PN. OR ("6114752").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2006/10/24 10:46
S26	4	("5140404" "5491362" "6114752" "6191490").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2006/10/24 14:37
S27	12	("4884124" "5223740" "5233222" "5264730" "5327008" "5521428" "5550402" "5661338" "5683944" "5723897" "5963782" "6049120").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2006/10/24 14:53
S28	24	"6114752"	US-PGPUB; USPAT; USOCR	OR	ON	2006/10/24 14:53
S29	1	"6114752".pn.	US-PGPUB; USPAT; USOCR	OR	ON	2006/10/24 15:00
S30	122	molding with epoxy with cost	US-PGPUB; USPAT; USOCR	OR	ON	2006/10/24 15:06
S31	0	S30 and 257/797.ccls.	US-PGPUB; USPAT; USOCR	OR	ON	2006/10/24 15:01
S32	48	S30 and "257"\$.ccls.	US-PGPUB; USPAT; USOCR	OR	ON	2006/10/24 15:01
S33	32	S30 and "257"\$.ccls.	USPAT	OR	ON	2006/10/24 15:06
S34	90	encapsulat\$3 with epoxy with cost	US-PGPUB; USPAT; USOCR	OR	ON	2006/10/24 15:08
S35	31	S34 and "257"\$.ccls.	USPAT	OR	ON	2006/10/24 15:08
S36	10021	encapsulat\$3 with epoxy	US-PGPUB; USPAT; USOCR	OR	ON	2006/10/24 15:08
S37	2386	S36 and "257"\$.ccls.	USPAT	OR	ON	2006/10/24 15:09
S38	77	encapsulat\$3 with epoxy with prefer\$5	US-PGPUB; USPAT; USOCR	OR	ON	2006/10/24 15:09
S39	25	S38 and "257"\$.ccls.	USPAT	OR	ON	2006/10/24 15:11

## EAST Search History

S43	29	epoxy near1 resin with commonly with used with (reliability moldability, moisture absorbing resistance-adhesion)	USPAT	OR	ON	2006/10/24 16:10
S44	283	((flores or ruiz) with delma).xa.	USPAT	OR	ON	2006/10/24 16:10
S45	359	(armando with rodriguez).xa.	USPAT	OR	ON	2006/10/24 16:11
S46	61	(armando with rodriguez).xp.	USPAT	OR	ON	2006/10/24 16:11
S47	42	andujar.xp.	USPAT	OR	ON	2006/10/24 16:14
S48	16	("4835593" "5162257" "5244143" "5767010" "5775569" "5937320" "6003757" "6056191").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/10/28 13:52
S49	2	"20050224966".pn.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/10/28 13:23
S50	8	("4835593" "5162257" "5244143" "5767010" "5775569" "5937320" "6003757" "6056191").PN.	USPAT	OR	ON	2006/10/28 13:53
S51	2	S50 and lead near2 free	USPAT	OR	ON	2006/10/28 13:54
S52	2223	(438/614).CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/10/28 13:54
S53	24	S52 and (Pb lead) near2 free and (BLM UBM)	USPAT	OR	ON	2006/10/28 13:58
S54	29	"438"/\$.ccls. and (Pb lead) near2 free and (BLM UBM) and sputtering	USPAT	OR	ON	2006/10/28 13:59
S55	2	("20020137325" "6492197").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2006/10/28 15:06
S56	8	(BLM UBM) with adhesion with thickness	US-PGPUB; USPAT; USOCR	OR	ON	2006/10/28 15:25
S57	651	(BLM UBM) with (ti tin ta tan zr znn v ni)	US-PGPUB; USPAT; USOCR	OR	ON	2006/10/28 15:26
S58	58	S57 and 257/737.ccls.	US-PGPUB; USPAT; USOCR	OR	ON	2006/10/28 15:27
S59	31	S57 and 257/737.ccls.	USPAT	OR	ON	2006/10/28 15:41
S60	1	barrier with au with wettab\$5 with bump	USPAT	OR	ON	2006/10/28 15:43
S61	103	barrier with au with bump	USPAT	OR	ON	2006/10/28 15:45

## EAST Search History

S62	12	barrier with wetting with layer with au	USPAT	OR	ON	2006/10/28 15:46
S63	21062	gold with bump wit plating with seed	USPAT	OR	ON	2006/10/28 15:47
S64	6	gold with bump with plating with seed	USPAT	OR	ON	2006/10/28 15:50
S65	4	au with bump with plating with seed	USPAT	OR	ON	2006/10/28 15:52
S66	54	bump same (au gold) with wetting	USPAT	OR	ON	2006/10/28 15:58
S67	52	bump with plating with seed with layer	USPAT	OR	ON	2006/10/28 16:03
S68	2	final with wettable with (layer film) with (gold au)	USPAT	OR	ON	2006/10/28 16:04
S69	180	wettable with (layer film) with (gold au)	USPAT	OR	ON	2006/10/28 16:09
S70	1	"5,234,149".pn.	USPAT	OR	ON	2006/10/28 17:03
S71	0	tin with bump with cu with wettable	USPAT	OR	ON	2006/10/28 17:04
S72	2	tin with bump same cu with wett\$6	USPAT	OR	ON	2006/10/28 17:04
S73	191	wettable with layer with (copper cu)	USPAT	OR	ON	2006/10/28 17:06
S74	4	wettable with layer with (copper cu) and pure near2 (tin sn) with (bump ball c4)	USPAT	OR	ON	2006/10/28 17:40
S75	2	(bump solder near2 ball) with anneal\$5 with minutes	USPAT	OR	ON	2006/10/28 18:03
S76	10	(bump solder near2 ball) with anneal\$5 with (min minutes hour second)	USPAT	OR	ON	2006/10/28 17:44
S77	94	(bump solder near2 ball) with anneal\$5	USPAT	OR	ON	2006/10/28 17:44
S78	29	(bump solder near2 ball) with anneal\$5 and anneal\$5 with (min minutes hour second)	USPAT	OR	ON	2006/10/28 17:45
S79	1	"5532612".pn. and anneal\$5	USPAT	OR	ON	2006/10/28 18:04
S80	1	"5532612".pn. and anneal\$5 with minutes	USPAT	OR	ON	2006/10/28 18:13
S81	1	"5,234,149".pn. and (cap capping)	USPAT	OR	ON	2006/10/28 18:15
S82	737	(cap or capping) with layer with (sputtering plating evaporation)	USPAT	OR	ON	2006/10/28 18:16
S83	5	(cap or capping) with layer with (sputtering plating evaporation) and 257/737.ccls.	USPAT	OR	ON	2006/10/28 18:16
S84	290	(cap or capping) with layer with (sputtering plating evaporation) and "438"/\$.ccls.	USPAT	OR	ON	2006/10/28 18:18
S85	4	(ball c4 bump flip solder near2 ball) same (cap or capping) with layer with (sputtering plating evaporation) and "438"/\$.ccls.	USPAT	OR	ON	2006/10/28 18:19

## EAST Search History

S86	0	(ball c4 bump flip solder near2 ball) same metal near2 layer with deposit\$5 with (sputtering plating evaporation) with cost and "438"/\$.ccls.	USPAT	OR	ON	2006/10/28 18:20
S87	1	metal near2 layer with deposit\$5 with (sputtering plating evaporation) with cost and "438"/\$.ccls.	USPAT	OR	ON	2006/10/28 18:21
S88	1344965	metal deposit\$5 with (sputtering plating evaporation) with cost and "438"/\$.ccls.	USPAT	OR	ON	2006/10/28 18:21
S89	22	metal with deposit\$5 with (sputtering plating evaporation) with cost and "438"/\$.ccls.	USPAT	OR	ON	2006/10/28 18:22
S90	40	(gold au) with plating with cost and "438"/\$.ccls.	USPAT	OR	ON	2006/10/28 18:24
S91	1	(sn) with plating with low with cost and "438"/\$.ccls.	USPAT	OR	ON	2006/10/28 18:24
S92	2	(sn tin) with plating with low with cost and "438"/\$.ccls.	USPAT	OR	ON	2006/10/28 18:24
S93	26	solder with wettable with (sputtering plating evaporation) and "438"/\$.ccls.	USPAT	OR	ON	2006/10/28 18:29
S94	88	solder with wettable with (sputtering plating evaporation)	USPAT	OR	ON	2006/10/28 18:29
S95	62	S94 not S93	USPAT	OR	ON	2006/10/28 18:29